

EXHIBIT NO. 1DATE: 4-21-15BILL NO. HJ 24

Bridge failure repaired on Highway 12 15 miles east of Townsend

INDEPENDENT RECORD

The Montana Department of Transportation repaired a bridge failure on U.S. Highway 12 near Townsend Tuesday.

A bridge inspector discovered that one of the four outside edge pillars was missing on a bridge located 15.1 miles east of Townsend.

The inspector reported the failure at 6:15 p.m. Monday, leading to a temporary closure, said transportation department spokeswoman Lori Ryan.

Single-lane traffic was later allowed through at reduced speeds, she said.

Transportation officials were on the scene Tuesday for repairs.

As of 1:30 p.m., repairs were completed and traffic restored, Ryan said.

The bridge is scheduled for replacement this summer, she said.

Montana's Top 20 Transportation Challenges and Improvements Needed to Address Them

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Founded in 1971, TRIP ® of Washington, DC, is a nonprofit organization that researches, evaluates and distributes economic and technical data on surface transportation issues. TRIP is sponsored by insurance companies, equipment manufacturers, distributors and suppliers; businesses involved in highway and transit engineering and construction; labor unions; and organizations concerned with efficient and safe surface transportation.

Executive Summary

Montana's extensive system of roads, highways and bridges provides the state's residents, visitors and businesses with a high level of mobility. As the backbone of the Treasure State's economy, Montana's surface transportation system plays a vital role in the state's economic well-being, and is an integral part of what makes Montana an attractive place to live, work and do business.

However, roadway and bridge deterioration, traffic safety concerns, and a lack of adequate capacity on some corridors to support economic development opportunities threaten to stifle economic growth and negatively impact the quality of life of the state's residents. Due to insufficient transportation funding at the federal, state and local level, Montana faces numerous challenges in providing a road, highway and bridge network that is smooth, well-maintained, as safe as possible, and that affords a level of mobility capable of supporting the state's economic goals.

Many segments of Montana's transportation system have significant deterioration, lack some desirable safety features, and do not have adequate capacity to provide reliable mobility needed to support economic development particularly on routes that support the state's growing energy extraction industry, creating challenges for Montana's residents, visitors, businesses and state and local governments. This report looks at the condition and use of Montana's system of roads, highways and bridges and provides information on the state's top 20 transportation challenges and the improvements needed to address these challenges.

The transportation challenges outlined in this report represent approximately \$7.4 billion in needed improvements. However, at this time, only \$1.2 billion in funding for improvements for these corridors is available, leaving a backlog of nearly \$6.2 billion in needed improvements and upgrades.

The federal government is a significant source of transportation funding for Montana. Signed into law in July 2012, MAP-21 (Moving Ahead for Progress in the 21st Century Act), has improved several procedures that in the past had delayed projects, MAP-21 does not address long-term funding challenges facing the federal surface transportation program. In July 2014 Congress approved the Highway and Transportation Funding Act of 2014, an eight-month extension of the federal surface transportation program, on which states rely for road, highway, bridge and transit funding. The program, initially set to expire on September 30, 2014, will now run through May 31, 2015. Congress will need to pass new legislation prior to the May 31 extension expiration to ensure prompt federal reimbursements to states for road, highway, bridge and transit repairs and improvements.

As Montana works to build and support a thriving and diverse economy, it will need to modernize its transportation system by improving the physical condition of its roads, highways and bridges, and enhancing the system's ability to provide efficient, safe and reliable mobility to the state's residents, visitors and businesses. Making needed improvements to Montana's roads, highways and bridges would provide a significant boost to the state's economy by stimulating short and long-term economic growth.

Montana faces significant challenges on many of the state's most critical transportation routes, including the need to add capacity to support economic development, to improve roadway safety and to address pavement and bridge deterioration.

- This report identifies the top 20 transportation challenges in the state, including critical sections of the state's transportation system that have significant pavement deterioration, inadequate capacity, deficient bridges, or that need safety improvements.
- A lack of adequate transportation funding is the constraining factor in developing and delivering these needed improvements.
- Addressing the transportation challenges outlined in this report will cost approximately \$7.4 billion in needed improvements. However, at this time, funding for only \$1.2 billion in needed improvements on these corridors is available, leaving a backlog of nearly \$6.2 billion in needed improvements and upgrades.
- The following, ranked in order, are Montana's top transportation challenges. Further details about each challenge can be found in the body of the report, as well as the Appendix.

	ROUTE	CHALLENGE
1	I-90	Inadequate capacity, pavement deterioration and bridge replacement
2	I-15	Pavement deterioration, bridge repairs and inadequate capacity
3	I-94	Aging bridges, inadequate interchanges and deteriorated pavement
4	US-2	Deteriorated pavement, safety issues, bridge deterioration and inadequate capacity
5	US-12	Deteriorating pavement, safety issues and bridge deterioration
6	US-89	Deteriorated pavement, inadequate capacity and safety concerns
7	US-93	Inadequate capacity, operational issues and deteriorated pavements
8	Statewide	High rate of traffic fatalities
9	MT-200	Deteriorated pavement, needed bridge replacement and safety concerns
10	Billings Bypass	Needed construction of new bypass in Billings
11	US-191	Deteriorated pavement and safety issues
12	US-87	Deteriorated pavement, safety issues and deteriorated bridge conditions
13	US-212	Deteriorated pavement and safety issues
14	US-287	Deteriorated pavement, safety issues and needed bridge replacement
15	MT-16	Deteriorated pavement and safety issues
16	MT-86	Deteriorated pavement and bridges, safety issues
17	MT-1	Deteriorated pavement and bridges, safety issues and inadequate capacity
18	MT-41	Deteriorated pavement and bridges, safety issues and inadequate capacity
19	MT-69	Deteriorated pavement and bridges, safety issues and inadequate capacity
20	N-205	Deteriorated pavement, safety issues and congestion

Growth in population and vehicle travel has far outstripped the current capacity of Montana's transportation system. The state's population and economy will continue to grow, bringing mounting challenges for the existing network of roads and bridges.

- From 1990 to 2012, Montana's population increased by 26 percent, from approximately 800,000 residents to approximately one million.
- From 1990 to 2012, annual vehicle-miles-of-travel (VMT) in the state increased by 43 percent, from approximately 8.3 billion VMT to 11.9 billion VMT. Based on travel and population trends, TRIP estimates that vehicle travel in Montana will increase another 30 percent by 2030.
- Every year, \$22 billion in goods are shipped from sites in Montana and another \$38 billion in goods are shipped to sites in Montana, mostly by trucks. Fifty-nine percent of the goods shipped annually from sites in Montana are carried by trucks and another nine percent are carried by parcel, U.S. Postal Service or courier services, which use trucks for part of their deliveries.

Montana's extensive transportation system has some road and bridge deficiencies, lacks some desirable safety features and experiences severe congestion in key areas.

Improvements to the condition and efficiency of the state's transportation system would enhance quality of life, roadway safety and economic development.

- The state will need to expand and modernize key roads, highways and bridges to increase mobility and ease traffic congestion, make needed road and bridge repairs, and improve roadway safety.
- In 2012, 29 percent of Montana's major state and locally maintained urban roads were in poor condition, 37 percent were in mediocre or fair condition, and 33 percent were in good condition. Six percent of Montana's state and locally maintained rural roads were rated in poor condition in 2012, while 35 percent were rated in mediocre or fair condition and 59 percent were rated in good condition.
- Seven percent of Montana's bridges were rated structurally deficient in 2013. A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Structurally deficient bridges are often posted for lower weight or closed to traffic, restricting or redirecting large vehicles, including commercial trucks, school buses and emergency services vehicles.
- In 2013, 10 percent of Montana's bridges were rated as functionally obsolete. Bridges that are functionally obsolete no longer meet current highway design standards or are inadequate to accommodate current traffic levels, often because of narrow lanes, inadequate clearances or poor alignment.

- Several factors are associated with vehicle crashes that result in fatalities, including driver behavior, vehicle characteristics and roadway features. TRIP estimates that roadway features are likely a contributing factor in approximately one-third of fatal traffic crashes. A total of 1,053 people died on Montana's highways from 2008 through 2012, an average of 211 annually.
- Montana's overall traffic fatality rate of 1.72 fatalities per 100 million vehicle miles of travel in 2012 is significantly higher than the national average of 1.13 and the third highest in the nation.
- The fatality rate on Montana's rural non-Interstate roads was 2.4 fatalities per 100 million vehicle miles of travel in 2012, more than two and a half times the 0.95 fatality rate on all other roads and highways in the state.
- Roadway features that impact safety include the number of lanes, lane widths, lighting, lane markings, rumble strips, shoulders, guard rails, other shielding devices, median barriers and intersection design. The cost of serious crashes includes lost productivity, lost earnings, medical costs and emergency services.
- Where appropriate, highway improvements can reduce traffic fatalities and crashes while improving traffic flow to help relieve congestion. Such improvements include removing or shielding obstacles; adding or improving medians; improved lighting; adding rumble strips, wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; and better road markings and traffic signals.
- Investments in rural traffic safety have been found to result in significant reductions in serious traffic crashes. A 2012 report by the [Texas Transportation Institute](#) (TTI) found that improvements completed recently by the Texas Department of Transportation that widened lanes, improved shoulders and made other safety improvements on 1,159 miles of rural state roadways resulted in 133 fewer fatalities on these roads in the first three years after the improvements were completed (as compared to the three years prior). TTI estimates that the improvements on these roads are likely to save 880 lives over the next 20 years.

Transportation projects that improve the efficiency, condition or safety of a highway provide significant economic benefits by reducing transportation delays and costs associated with a deficient transportation system.

- In the eastern portion of the state, Bakken oil extraction and support activities have resulted in increased overall traffic volumes and considerably higher than usual truck traffic as a percentage of the overall traffic stream. This additional traffic places a high level of stress on roadways, many of which were not originally built to accommodate such heavy traffic volumes and large vehicles.
- Improved business competitiveness due to reduced production and distribution costs as a result of increased travel speeds and fewer mobility barriers.

- Improvements in household welfare resulting from better access to higher-paying jobs, a wider selection of competitively priced consumer goods, additional housing and healthcare options, and improved mobility for residents without access to private vehicles.
- Gains in local, regional and state economies due to improved regional economic competitiveness, which stimulates population and job growth.
- Increased leisure/tourism and business travel resulting from the enhanced condition and reliability of a region's transportation system.
- A reduction in economic losses from vehicle crashes, traffic congestion and vehicle maintenance costs associated with driving on deficient roads.
- Transportation projects that expand roadway or bridge capacity produce significant economic benefits by reducing congestion and improving access, thus speeding the flow of people and goods while reducing fuel consumption.
- Transportation projects that maintain and preserve existing transportation infrastructure also provide significant economic benefits by improving travel speeds, capacity, load-carry abilities and safety, and reducing operating costs for people and businesses. Such projects also extend the service life of a road, bridge or transit vehicle or facility, which saves money by either postponing or eliminating the need for more expensive future repairs.
- The Federal Highway Administration estimates that each dollar spent on road, highway and bridge improvements results in an average benefit of \$5.20 in the form of reduced vehicle maintenance costs, reduced delays, reduced fuel consumption, improved safety, reduced road and bridge maintenance costs, and reduced emissions as a result of improved traffic flow.

According to a recent national report, improved access as a result of capacity expansions provides numerous regional economic benefits. Those benefits include higher employment rates, higher land value, additional tax revenue, increased intensity of economic activity, increased land prices and additional construction as a result of the intensified use.

- The 2012 report, "Interactions Between Transportation Capacity, Economic Systems and Land Use," prepared by the Strategic Highway Research Program for the Transportation Research Board, reviewed 100 projects, costing a minimum of \$10 million, which expanded transportation capacity either to relieve congestion or enhance access.
- The projects analyzed in the report were completed no later than 2005 and included a wide variety of urban and rural projects, including the expansion or addition of major highways, beltways, connectors, bypasses, bridges, interchanges, industrial access roads, intermodal freight terminals and intermodal passenger terminals.

- The expanded capacity provided by the projects resulted in improved access, which resulted in reduced travel-related costs, faster and more reliable travel, greater travel speeds, improved reliability and increased travel volume.
- The report found that improved transportation access benefits a region by: enhancing the desirability of an area for living, working or recreating, thus increasing its land value; increasing building construction in a region due to increased desirability for homes and businesses; increasing employment as a result of increased private and commercial land use; and increasing tax revenue as a result of increased property taxes, increased employment and increased consumption, which increases sales tax collection.
- The report found that benefits of a transportation capacity expansion unfolded over several years and that the extent of the benefits were impacted by other factors including: the presence of complimentary infrastructure such as water, sewer and telecommunications; local land use policy; the local economic and business climate; and whether the expanded capacity was integrated with other public investment and development efforts.
- For every \$1 million spent on urban highway or intermodal expansion, the report estimated that an average of 7.2 local, long-term jobs were created at nearby locations as a result of improved access. An additional 4.4 jobs were created outside the local area, including businesses that supplied local businesses or otherwise benefited from the increased regional economic activity.
- For every \$1 million spent on rural highway or intermodal expansion, the report estimated that an average of 2.9 local, long-term jobs were created at nearby locations as a result of improved access. An additional 1.6 jobs were created outside the local area, including businesses that supplied local businesses or otherwise benefited from the increased regional economic activity.
- The report found that highway and intermodal capacity projects in urban areas created a greater number of long-term jobs than in rural areas, largely due to the more robust economic environment and greater density in urban communities.

In addition to state and local governments, the federal government is a critical source of funding for Montana's roads, highways and bridges and provides a significant return in road and bridge funding based on the revenue generated in the state by the federal motor fuel tax.

- Signed into law in July 2012, MAP-21 (Moving Ahead for Progress in the 21st Century Act), has improved several procedures that in the past had delayed projects, MAP-21 does not address long-term funding challenges facing the federal surface transportation program.